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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO	
09/931,821 08/		98/16/2001 Brant Candelore		80398P422	3277	
8791	7590	11/18/2004		EXAM	EXAMINER	
		OFF TAYLOR &	CHAI, L	CHAI, LONGBIT		
SEVENTH		OUĻEVARD	ART UNIT	PAPER NUMBER		
LOS ANGE	LES, CA	90025-1030	2131			

DATE MAILED: 11/18/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

PTO-90C (Rev. 10/03)

		Application	on No.	Applicant(s)				
		09/931,82	21	CANDELORE, BRANT				
Office Action Summary		Examiner		Art Unit				
		Longbit C	hai	2131				
Period fo	The MAILING DATE of this communication a or Reply	ppears on the	cover sheet with the c	orrespondence address				
A SH THE - Exter after - If the - If NC - Failu Any	ORTENED STATUTORY PERIOD FOR REF MAILING DATE OF THIS COMMUNICATION nsions of time may be available under the provisions of 37 CFR SIX (6) MONTHS from the mailing date of this communication. Period for reply specified above is less than thirty (30) days, and period for reply is specified above, the maximum statutory period for reply within the set or extended period for reply will, by state reply received by the Office later than three months after the mailed patent term adjustment. See 37 CFR 1.704(b).	N. 1.136(a). In no every eply within the state of will apply and we cute, cause the app	ent, however, may a reply be timutory minimum of thirty (30) day: Il expire SIX (6) MONTHS from lication to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).				
Status								
·	Responsive to communication(s) filed on <u>15 October 2004</u> . This action is FINAL . 2b) This action is non-final. Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.							
Dispositi	ion of Claims							
5)□ 6)⊠ 7)□ 8)□	Claim(s) is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. Claim(s) is/are allowed. Claim(s) 1-58 is/are rejected. Claim(s) is/are objected to. Claim(s) are subject to restriction and/or election requirement.							
9) 又	The specification is objected to by the Exami	ner.						
10)⊠	The drawing(s) filed on 16 August 2001 is/ard Applicant may not request that any objection to the Replacement drawing sheet(s) including the correct The oath or declaration is objected to by the	e: a)⊠ acce ne drawing(s) t ection is requir	be held in abeyance. See held if the drawing(s) is obj	e 37 CFR 1.85(a). lected to. See 37 CFR 1.121(d).				
Priority (under 35 U.S.C. § 119							
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 								
	ce of References Cited (PTO-892)		4) Interview Summary					
3) 🔯 Infor	ce of Draftsperson's Patent Drawing Review (PTO-948) mation Disclosure Statement(s) (PTO-1449 or PTO/SB/0er No(s)/Mail Date <u>08-05-2004</u> .	08)	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate Patent Application (PTO-152)				

DETAILED ACTION

Priority

- 1. Applicant's claim for domestic priority under 35 U.S.C. 119(e) is acknowledged.
- 2. The application is filed on 08/16/2001 but claims the benefit of U.S. provisional application number 60/254,326 filed on Dec 8, 2000.
- 3. Therefore, the effective filing date for the subject matter defined in the pending claims in this application is 12/08/2000.

Information Disclosure Statement

The information disclosure statement filed on 10/15/2004 fails to comply with 37 CFR 1.98(a)(1), which requires a list of all patents, publications, or other information submitted for consideration by the Office because the references are not listed and submitted with the application and thereby the information referred to therein can not been considered.

Specification

4. The disclosure is objected to because of the following informalities: The language "PCT may be swiped" shown on 37th-Paragraph in the specification has spelling error. It should be labeled as "PTC may be swiped". See 37 CFR 1.71.

Appropriate correction is required.

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Drawings

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5. Figure 1 should be designated by a legend such as --Prior Art-- because only that which is old is illustrated. See MPEP § 608.02(g). Corrected drawings in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. The replacement sheet(s) should be labeled "Replacement Sheet" in the page header (as per 37 CFR 1.121(d)) so as not to obstruct any portion of the drawing figures. If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraph of 35 U.S.C. 102 that forms the basis for the rejections under this section made in this Office action:

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 6. Claims 1, 2, 6, 15, 16, 22, 25, 28, 40, 41, 42, 52, 54 and 55 are rejected under 35 U.S.C. 102(b) as being anticipated by Johnson (Patent Number: 5598474), hereinafter referred to as Johnson.

As per claim 1, 15, and 54, Johnson teaches calculating a cryptogram based upon security information; and writing the cryptogram on a magnetic stripe of a personal

transaction card after a user takes possession of the card (Johnson: see for example, Column 5 Line 52 – 59).

As per claim 2, 52, and 55, Johnson teaches the claimed invention as described above (see claim 1, 51 and 54 respectively). Johnson further teaches reading the security information from the magnetic stripe of the personal transaction card (Johnson: see for example, Column 6 Line 34 – 37).

As per claim 6 and 28, Johnson teaches the claimed invention as described above (see claim 1 and 15 respectively). Johnson teaches the security information is selected from the group consisting of: biometric information; an existing data on the magnetic stripe; a transaction amount; and a personal identification number (PIN) code (Johnson: see for example, Column 5 Line 52 – 59 and Column 6 Line 34 – 37).

As per claim 16, Johnson teaches the claimed invention as described above (see claim 15). Johnson teaches comprising a secure processing unit coupled to the device to calculate the cryptogram (Johnson: see for example, Column 9 Line 65 – 67).

As per claim 22, Johnson teaches the claimed invention as described above (see claim 15). Johnson further teaches a reader coupled to the device to read existing data from the magnetic stripe (Johnson: see for example, Column 10 Line 3-4).

As per claim 25, Johnson teaches the claimed invention as described above (see claim 15). Johnson further teaches the writer is externally located from the device (Johnson: see for example, Figure 2 Element 21 & 22).

As per claim 40 and 42, Johnson teaches the claimed invention as described above (see claim 15). Johnson further teaches comprising a transaction terminal configured to couple to the device (Johnson: see for example, Column 10 Line 34 – 37):

As per claim 41, Johnson teaches the claimed invention as described above (see claim 40). Johnson further teaches comprising the transaction terminal is selected from the group further consisting of: a point of sale (POS) terminal; a home computer system; a bank automatic teller machine (ATM) terminal; a digital television; and a personal POS terminal (Johnson: see for example, Column 10 Line 34 – 37).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

7. Claims 3, 5, 7 – 14, 36 – 39, 43, 50, 53, and 56 – 58 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (Patent Number: 5598474), hereinafter referred to as Johnson, in view of Gordon (Patent Number: US 6289323 B1), hereinafter referred to as Gordon.

As per claim 3 and 56, Johnson teaches the claimed invention as described above (see claim 1, 51 and 54 respectively). Johnson does not disclose expressly verifying the cryptogram by comparing it against a cryptogram generated by an independent cryptogram verification source (ICVS).

Gordon teaches verifying the cryptogram by comparing it against a cryptogram generated by an independent cryptogram verification source (ICVS) (Gordon: see for example, Column 2 Line 5-24 and Column 4 Line 31-43).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gordon within the system of Johnson because (a) Johnson teaches writing and reading the security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Gordon teaches a method of authentication based on the cryptogram that can greatly enhance the privacy and convenience for conducting monetary transaction (Gordon: see for example, Column 2 Line 5 - 24 and Column 4 Line 31 - 43).

As per claim 4, Johnson as modified teaches the claimed invention as described above (see claim 3). Johnson as modified further teaches authorizing a transaction

based upon the verifying of the cryptogram (Gordon: see for example, Column 2 Line 5 – 24 and Column 4 Line 31 – 43).

As per claim 5 and 10, Johnson teaches the claimed invention as described above (see claim 3 and 8 respectively). Johnson does not disclose expressly the independent cryptogram verification source is a transaction privacy clearing house (TPCH).

Gordon teaches the independent cryptogram verification source is a transaction privacy clearing house (TPCH) (Gordon: see for example, Column 2 Line 5 – 24: The postal authority as taught by Gordon is indeed qualified as a transaction privacy clearing house (TPCH). See the same rationale of combination applied herein as above in rejecting claim 3.

As per claim 7, 14 and 58, claim 7, 14 and 58 do not further teach over claim 5 as addressed above.

As per claim 8, claim 8 encompasses the same scope as described in claim 1, 2, 3 and 4 as addressed above.

As per claim 9, Johnson as modified teaches the claimed invention as described above (see claim 8). Johnson as modified further teaches authorizing access to the device by a security device (Gordon: see for example, Column 3 Line 62 – 65).

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As per claim 11, Johnson as modified teaches the claimed invention as described above (see claim 8). Johnson as modified further teaches verifying that the cryptogram has been written to the card. Johnson as modified does not disclose expressly receiving the card in the device for at least one additional swipe to read the data and write the cryptogram to the card if the verification fails.

However, Official Notice is taken that re-enter the card after authentication process failure is one of the well-known methods in the field. Therefore, it would have been obvious to a person of ordinary skill in the art at the time the invention was made to re-enter the card upon the verification failure of the cryptogram that has not yet been successfully written to the card.

As per claim 12, Johnson as modified teaches the claimed invention as described above (see claim 8). Johnson as modified further teaches sending a confirmation message to a display of the device to verify that the cryptogram has been written to the card (Johnson: see for example, Column 6 Line 26 – 29 and Column 6 Line 49 - 53).

As per claim 13, Johnson as modified teaches the claimed invention as described above (see claim 8). Johnson as modified further teaches the transaction terminal is a point of sale terminal (Johnson: see for example, Column 10 Line 34 –37).

As per claim 36, 37, 50, 53 and 57, claim 36, 37, 50, 53 and 57do not further teach over claim 3 and 5 as addressed above.

As per claim 38, Johnson as modified teaches the claimed invention as described above (see claim 36). Johnson as modified further teaches the TPCH is further configured to selectively couple to a financial institution (Johnson: see for example, Column 3 Line 12 – 15 and Column 5 Line 35 – 38).

As per claim 39, Johnson as modified teaches the claimed invention as described above (see claim 36). Johnson as modified further teaches the TPCH is further configured to selectively couple to a financial institution (Johnson: see for example, Column 3 Line 12 – 15 and Column 5 Line 35 – 38).

As per claim 43, Johnson as modified teaches the claimed invention as described above (see claim 42). Johnson as modified further teaches the transaction terminal, the device and the TPCH are further configured to verify each other as legitimate (Johnson: see for example, Column 3 Line 63 – 66 and Column 6 Line 46 – 48).

8. Claims 17 – 19 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (Patent Number: 5598474), hereinafter referred to as Johnson, in view of Yamaguchi (Patent Number: US 6314196 B1), hereinafter referred to as Yamaguchi.

As per claim 17, Johnson teaches the claimed invention as described above (see claim 15). Johnson does not disclose expressly the cryptogram is further based upon a current time.

Yamaguchi teaches the cryptogram is further based upon a current time (Yamaguchi: see for example, Column 34 Line 41 – 52 and Figure 21 Element 82).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Yamaguchi within the system of Johnson because (a) Johnson teaches writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Yamaguchi teaches registering and validating the fingerprint information based upon the timestamp of the fingerprint to assure the expiration after the effective time period so that the security can be greatly enhanced (Yamaguchi: see for example, Column 34 Line 41 – 52 and Figure 21 Element 82).

As per claim 18, Johnson as modified teaches the claimed invention as described above (see claim 17). Johnson as modified further teaches a secure time source coupled to the device to provide the current time (Yamaguchi: see for example, Figure 19 Element 76).

As per claim 19, Johnson as modified teaches the claimed invention as described above (see claim 17). Johnson as modified further teaches comprising an

interface with a secure time source coupled to the device to provide the current time (Yamaguchi: see for example, Figure 19 Element 76).

As per claim 24, Johnson teaches the claimed invention as described above (see claim 15). Johnson does not disclose expressly comprising a voiding component coupled to the device to void the cryptogram after the expiration of some time period.

Yamaguchi teaches comprising a voiding component coupled to the device to void the cryptogram after the expiration of some time period (Yamaguchi: see for example, Column 34 Line 41 – 52 and Figure 21 Element 82).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Yamaguchi within the system of Johnson because (a) Johnson teaches writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Yamaguchi teaches registering and validating the fingerprint information based upon the timestamp of the fingerprint to assure the expiration after the effective time period so that the security can be greatly enhanced (Yamaguchi: see for example, Column 34 Line 41 – 52 and Figure 21 Element 82).

9. Claims 20, 21, 23, 26, 27, 29 – 32 and 44 – 49 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (Patent Number: 5598474), hereinafter referred to as Johnson, in view of Messmer (Pentagon gets "smart", September 1999), hereinafter referred to as Messmer.

As per claim 20 and 21, Johnson teaches the claimed invention as described above (see claim 15). Johnson does not disclose expressly the device is a personal transaction device.

Messmer teaches the device is a personal transaction device (Messmer: see for example, Page 2, Last Paragraph).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Messmer within the system of Johnson because (a) Johnson teaches a system writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Messmer teaches the associated identification card can be a smart card (Messmer: see for example, Page 2, Last Paragraph).

As per claim 23, Johnson teaches the claimed invention as described above (see claim 22). Johnson does not disclose expressly the reader is built into the writer.

Messmer teaches the reader is built into the writer (Messmer: see for example, Page 1 Last Paragraph and page 3 – 6th & 8th Paragraphs).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Messmer within the system of Johnson because (a) Johnson teaches a system writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card

and (b) Messmer teaches the associated identification card can be a smart card (Messmer: see for example, Page 2, Last Paragraph).

As per claim 26, Johnson teaches the claimed invention as described above (see claim 15). Johnson does not disclose expressly the writer places an item of transaction data on the magnetic stripe.

Messmer teaches the writer places an item of transaction data on the magnetic stripe (Messmer: see for example, Page 3 Last Paragraph 1st sentence).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Messmer within the system of Johnson because (a) Johnson teaches a system writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Messmer teaches the associated identification card can be a smart card (Messmer: see for example, Page 2, Last Paragraph).

As per claim 27, Johnson as modified teaches the claimed invention as described above (see claim 26). Johnson as modified further teaches the transaction data is selected from the group consisting of: a current time; an identification (ID) of an item to purchase; a transaction amount limit; and a transaction type restriction (Messmer: see for example, Page 3, Last Paragraph 1st Sentence).

As per claim 29, Johnson teaches the claimed invention as described above (see claim 15). Johnson further teaches the device is selected from the group consisting of: a privacy card; a digital wallet; and a privacy card configured to be coupled to a digital wallet (Messmer: see for example, Page 1, 6th Paragraph). See the same rationale of combination applied herein as above in rejecting claim 20.

As per claim 30, Johnson teaches the claimed invention as described above (see claim 15). Johnson does not disclose expressly a security device coupled to the device to prevent unauthorized use of the device.

Messmer teaches a security device coupled to the device to prevent unauthorized use of the device (Messmer: see for example, Page 2, 1st Paragraph).

See the same rationale of combination applied herein as above in rejecting claim 20.

As per claim 31, Johnson as modified teaches the claimed invention as described above (see claim 30). Johnson as modified further teaches the security device is selected from the group consisting of: a biometric security component; and a keypad for personal identification number (PIN) code input (Messmer: see for example, Page 2, 1st Paragraph).

As per claim 32, Johnson as modified teaches the claimed invention as described above (see claim 30). Johnson as modified further teaches the security device places a restriction on use of the device, the restriction selected from the group

consisting of: a transaction amount; a transaction type; and a user having authorization to use the device (Messmer: see for example, Page 2, 1st Paragraph).

As per claim 44, Johnson teaches a device to calculate a cryptogram based upon a security information, the device further having a device identifier that provides no apparent identification of a user authorized to use the device; a writer, coupled to the device, to write the cryptogram on a magnetic stripe of a personal transaction card after a user takes possession of the card (Johnson: see for example, Column 5 Line 52 -59).

However, Johnson does not disclose expressly the device having a device identifier.

Messmer teaches the device having a device identifier that provides no apparent identification of a user authorized to use the device (Messmer: see for example, Page 2, Last Paragraph).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Messmer within the system of Johnson because (a) Johnson teaches a system writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Messmer teaches the associated identification card can be a smart card (Messmer: see for example, Page 2, Last Paragraph).

Johnson as modified further teaches a communication logic coupled to the device configured to communicate the device identifier and the cryptogram to a system

to perform a transaction, the system comprising a secure mechanism for correlating the cryptogram, device identifier and the user; and a security logic coupled to the device configured to allow an authorized user to use the device to perform a transaction based upon verification of the cryptogram by the system (Messmer: see for example, Page 2, 1st Paragraph (the user), 4th Paragraph (the cryptogram) and Last Paragraph (the device ID)).

As per claim 45, Johnson as modified teaches the claimed invention as described above (see claim 44). Johnson as modified further teaches the security logic confirms a user of the device, the security logic selected from the group consisting of: the cryptogram; a personal identification number (PIN) code; a biometric information; and a transaction amount (Messmer: see for example, Page 2, 1st Paragraph).

As per claim 46, Johnson as modified teaches the claimed invention as described above (see claim 44). Johnson as modified further teaches the communication logic is selected from the group consisting of: an IC card interface; a contactless connection; a magnetic stripe; and a wireless connection (Messmer: see for example, Page 3, 4th Paragraph and Page 2, 4th Paragraph).

As per claim 47, Johnson as modified teaches the claimed invention as described above (see claim 44). Johnson as modified further teaches comprising a

transaction history storage area coupled to the device and configured to store transaction records (Messmer: see for example, Page 3, 6th Paragraph).

As per claim 48, Johnson as modified teaches the claimed invention as described above (see claim 44). Johnson as modified further teaches comprising a financial data storage area coupled to the device and configured to store information selected from the group consisting of electronic coupons, account balances and other data used during a transaction (Messmer: see for example, Page 3, 6th Paragraph).

As per claim 49, Johnson as modified teaches the claimed invention as described above (see claim 44). Johnson as modified further teaches the communication logic is configured to accept direct marketing information (Messmer: see for example, Page 3, 4th Paragraph).

10. Claims 33 – 35 and 51 are rejected under 35 U.S.C. 103(a) as being unpatentable over Johnson (Patent Number: 5598474), hereinafter referred to as Johnson, in view of Gordon (Patent Number: US 6289323 B1), hereinafter referred to as Gordon, and in view of Yamaguchi (Patent Number: US 6314196 B1), hereinafter referred to as Yamaguchi.

As per claim 33, Johnson teaches the claimed invention as described above (see claim 15). Johnson does not disclose expressly the cryptogram is a cryptographic hash value of the current time and the security information.

Gordon teaches the cryptogram is a cryptographic hash value of the security information (Gordon: see for example, Column 8 Line 7 - 16).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Gordon within the system of Johnson because (a) Johnson teaches a system writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Gordon teaches a technique validating the cryptogram by using a cryptographically transformed representation of the private key digital signature in monetary transaction (Gordon: see for example, Column 8 Line 7 – 16).

However, Johnson as modified does not disclose expressly the cryptogram is a cryptographic hash value of the current time.

Yamaguchi teaches the cryptogram is a cryptographic hash value of the current time (Yamaguchi: see for example, Column 34 Line 41 – 52 and Figure 21 Element 82).

It would have been obvious to a person of ordinary skill in the art at the time the invention was made to combine the teaching of Yamaguchi within the system of Johnson as modified because (a) Johnson teaches writing and reading the fingerprint security information in a form of cryptogram to/from the magnetic stripe of an identification card and (b) Yamaguchi teaches registering and validating the fingerprint information based upon the timestamp of the fingerprint to assure the expiration after

the effective time period so that the security can be greatly enhanced (Yamaguchi: see for example, Column 34 Line 41 - 52 and Figure 21 Element 82).

As per claim 34, Johnson as modified teaches the claimed invention as described above (see claim 33). Johnson as modified further teaches a key is used in calculating of the cryptographic hash value (Yamaguchi: see for example, Column 4 Line 31 – 43).

As per claim 35, Johnson as modified teaches the claimed invention as described above (see claim 34). Johnson as modified further teaches the key is selected from the group consisting of: a symmetric key; a private key; and a secret key (Yamaguchi: see for example, Column 4 Line 31 – 43).

As per claim 51, claim 51 does not further teach over claim 15 and 33 as addressed above.

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Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Longbit Chai whose telephone number is 703-305-0710.

The examiner can normally be reached on Monday-Friday 8:00am-5:00pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Ayaz R Sheikh can be reached on 703-305-9648. The fax phone number

for the organization where this application or proceeding is assigned is 703-872-9306.

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Longbit Chai Examiner Art Unit 2131

LBC

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